

# Q-SERIES LINEUP

## Naming rule for Q-series PACs

# HCQ1□-1300-D2

### Product name

**HC** HC: HCFA controller

### Series name

**Q1** Q0: Basic bus motion controller  
 Q1: Standard bus motion controller  
 Q3: High-end bus motion controller  
 Q5: Basic intelligent mechanical controller  
 Q7: Standard intelligent mechanical controller  
 Q9: High-end intelligent mechanical controller

### Series models

**□** N/A: Standard type  
 S: Basic type  
 J: Modular type

### Operating system

**1** 1: Linux  
 2: Windows10  
 3: Windows7  
 4: QNX

### Number of motion control axis

**3** n (0~8): 2<sup>n+2</sup>  
 Note: Number of axes recommended by the controller.

### Control software module

**0** 0: CODESYS  
 1: HCPACS  
 2: ROBOT  
 3: CNC  
 4: MC  
 9: N/A

### Additional function software module

**0** 0: Standard software  
 1: Machine vision  
 2: Edge computing

### Power type

**D** D: DC power  
 A: AC power

### Product iteration serial number

**2**

## Recommended number of axes

Series name	Classification	Recommended number of axes	Max. number of axes
HCQ0S*	1200	CANOpen: 16 axes	Unlimited
HCQ0	1100	EtherCAT: 8 axes	Up to 8 axes
	1200	EtherCAT: 16 axes	Unlimited
HCQ1	1200	EtherCAT: 16 axes	Up to 16 axes
	1300	EtherCAT: 32 axes	Unlimited
HCQ5	1400	EtherCAT: 64 axes	Up to 64 axes
	1500	EtherCAT: 128 axes	Unlimited
HCQ7*	1500	EtherCAT: 128 axes	Up to 128 axes
	1600	EtherCAT: 256 axes	Unlimited
HCQ9*	1600	EtherCAT: 256 axes	Up to 256 axes
	1700	EtherCAT: 256*2 axes	Unlimited

\* Under development

## HCQ0-1□00-D

Basic bus motion controller



**Basic performance** Program capacity 16MB Recommend number of axes: 16<sup>\*1</sup>  
 Output power 16W 16 local extension modules supported

**Functions** Number of IO points for main unit Single-axis positioning and fixed-speed  
 Electric cam/flying shear/rotary shear Electronic gear  
 CNC G-code control/Robot control  
 Linear interpolation/circular interpolation/helical interpolation

**Supported protocol** EtherCAT CANOpen Modbus TCP  
 Modbus RTU

## HCQ1-1□00-D2

Standard bus motion controller



**Basic performance** Program capacity 16MB Recommend number of axes: 32<sup>\*1</sup>  
 Output power 16W 16 local extension modules supported

**Functions** Number of IO points for main unit Single-axis positioning and fixed-speed  
 High-speed pulse input/output Electric cam/flying shear/rotary shear Electronic gear  
 CNC G-code control/Robot control  
 Linear interpolation/circular interpolation/helical interpolation

**Supported protocol** EtherCAT CANOpen OPC/UA  
 EtherNet / IP Modbus TCP Modbus RTU

## HCQ5-1□00-A

Basic intelligent mechanical controller



**Basic performance** Program capacity 16MB Recommend number of axes: 128<sup>\*1</sup>  
 Output power 16W 16 local extension modules supported

**Functions** Single-axis positioning and fixed-speed Electronic gear Electric cam/flying shear/rotary shear  
 Linear interpolation/circular interpolation/helical interpolation CNC G-code control/Robot control

**Supported protocol** EtherCAT CANOpen<sup>\*2</sup> OPC/UA  
 EtherNet / IP Modbus TCP Modbus RTU

\*1 Recommended axis number for high-configuration models 4ms. For specific models, please refer to product naming rules.

\*2 Will be supported.